

United Nations Human Settlements Programme (UN-Habitat)

Call for Expressions of Interest for Cooperation Partners for Agreement of Cooperation

Integrating energy and resource efficiency measures and renewable energy technologies into existing building code and/or regulations in Cameroon, within the "Energy and Resources Efficiency in Building Code in West Africa" Programme.

> Date first published: **22 September 2014** Deadline for submissions of EoIs: **10 October 2014**

1. Introduction

Energy used in commercial and residential buildings accounts for a significant percentage of the total national energy consumption. It is estimated that 40% of the total electricity generated is used in buildings alone, consuming more energy than the transport and industry sectors. The building sector encompasses a diverse set of end-use activities, which have different energy use implications. The amount of energy used for cooling, heating and lighting is directly related to the building design, building materials, the occupants' needs and behavior, and the surrounding micro-climate. The majority of modern buildings in Sub-Saharan Africa (mainly tropical climates) are replicas of buildings designed for the western world (cold and temperate climates) and do not take into consideration the differences in climate. As a result, buildings are heavily reliant on artificial means for indoor comfort, i.e. cooling, heating and lighting. The problem is that inefficient design and construction using inappropriate materials, combined with poor understanding of thermal comfort, passive building principles and energy conscious behavior, has led to tremendous energy wastage.

With rapid population growth, increasing urbanization and continued rural to urban migration, Central African's urban housing stock is increasing rapidly along with the demand for energy for both domestic and industrial uses. African countries have the highest annual urbanization rate in the world, estimated at 4.5%. The demand for new urban houses is growing rapidly. All new buildings consume more energy than necessary as there are no legal measures or norms recommending appropriate building thermal design limits.

Existing building codes, building regulations and standards have limited references on sustainable construction and passive building design principles. They do not incorporate green building attributes such as water conservation, use of renewable energy sources, energy efficiency performance, optimal use of daylight and natural ventilation and requirements for acoustic comfort, onside waste management.

Addressing these issues, the Programme: Energy and Resources Efficiency in Building Code in West Africa has the objective to mainstream Energy Efficiency (EE) measures into housing policies, building codes and building regulations in Cameroon. In order to promote energy efficiency in building, the project intend to:

- 1. Review existing building codes laws and related housing policies and regulation in Cameroon under resources efficient angle;
- 2. Propose standard amendments that could be in the form of "Energy Conservation Acts", "by-law of Energy Efficiency in building or specific Regulations", or other form of



legislation that will enforce the adoption of energy efficiency measures in the building sector. ;

- 3. Formulation and adoption energy efficiency codes in buildings;
- 4. Awareness raising and capacity building in EE and best practices in the building sector.

The Programme seeks to facilitate a paradigm shift in terms of building design, construction and operation in Central Africa towards a culture of holistic energy efficiency in buildings, promoting environmentally sound buildings that contribute positively to in-door comfort for the end users. Further, as EE is considered to be the most effective method of mitigating climate change, resulting in stabilization, or even a reduction of GHG emissions.

UN-Habitat intends to provide technical assistance to national and local governments in reviewing and updating building laws and regulations, with a view to promote low-carbon practices, renewable energy sources, and energy efficient designs and standards and also revitalize urban planning as the most potent tool to curtail urban sprawl, promote sustainable renewable energy practices, and influence and structure future energy supply and demand.

2. Scope of Collaboration

UN-Habitat invites Expressions of Interest from Not-for-Profit Organizations or Governmental and Inter-Governmental organisations to integrating energy and resource efficiency measures and renewable energy technologies into existing building code and/or regulations in Cameroon. This is within the "Energy and Resources Efficiency in Building Code in West Africa" Programme. The key features of this initiative will comprise: compilation of regulations and norms that regulate the adoption of resource efficiency measures, including: passive building designs; energy efficiency; water efficiency; sustainable building materials; waste management, thermal and acoustic comfort; site planning, land management etc. and the use of renewable energy technologies in buildings.

EOI should contain but not be limited to the following:

- 1. Overall experience of the organization in Architecture, Civil Engineering, Urban or Regional Planning, or related areas, with expertise on Energy Efficient Building Codes and environmental building construction technologies.
- 2. Proven working experience in the development of building codes; energy and resource efficiency regulations and renewable energy technology in buildings. 2. Experience in conducting teaching and research and development activities related to energy-environmental issues on the urban and territorial building scale.
- 3. Support/contribution the organization is willing to make including, cash and in kind; (contribution in terms of staff time, equipment and logistical support, and other support in cash and in-kind should be expressed in monetary terms).
- 4. Copies of statement of annual budget and annual reports of the previous 5 years.
- 5. Copies of the two latest audited reports.
- 6. Governance and organizational structure; experience and qualifications of key professional staff of the organization.

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3. Budget

UN-Habitat will contribute to the tune of **USD30,000** towards this programme which will be implemented under the framework of an "Agreement of Cooperation" (AOC), wherein the Cooperating Partner is expected to make a significant contribution in cash or in-kind.

4. Overall Timeframe

The work outlined in this EOI is scheduled to commence in October 2014 and complete in July 2015.

5. Submission Requirements and Guidelines

Expression of Interest must be delivered in electronic format no later than **20 September 2014** to the e-mail address given below:

Souleymane.Diawara @unhabitat.org;

To be considered eligible, the institution submitting an Expression of Interest (EOI) must be a non-profit Organization with an experience of at least ten years related experience on technological research applied to the built environment. Significant experience in energy efficiency in buildings and collaboration in tropical countries is desirable.

6. Contact Information

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7. Other

Please note that this EOI notice does not constitute a solicitation. UN-Habitat reserves the right to change or cancel this requirement at any time in the Expression of Interest/or solicitation process.

Submitting a reply to an EOI does not guarantee that a Cooperation Partner will be considered for receipt of the solicitation when issued and only Cooperation Partners who are deemed qualified by UN-Habitat upon completion of evaluation of submission, will receive the final solicitation document.